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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,326	03/23/2004	Hiroshi Takahashi	2224-0230PUS1	1743
2292	7590	12/09/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			NGUYEN, THONG Q	
			ART UNIT	PAPER NUMBER
			2872	
DATE MAILED: 12/09/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b> 10/806,326	<b>Applicant(s)</b> TAKAHASHI ET AL.	
	<b>Examiner</b> Thong Q. Nguyen	<b>Art Unit</b> 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 21-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/22/04</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

1. The present Office action is made in response to the pre-amendment filed on 3/23/04 in which applicant has made changes to the specification.

***Election/Restrictions***

2. Applicant's election with traverse of Invention I, claims 1-20 and 26 in the reply filed on 9/23/05 is acknowledged. The traversal is on the ground(s) that the Examiner has not provided types of products could be made by the method as recited in claims 21-25 of the invention II. This is not found persuasive because the method as recited in the invention II could be used to product an optical element such as a film or a filter which film/filter does not need to have an uneven surface structure and to transmit and scatter light as the film with specific features recited in the invention I.

The requirement is still deemed proper and is therefore made FINAL.

As a result of applicant's election, claims 1-20 and 26 are examined in this Office action and claims 21-25 have been withdrawn from further consideration as being directed to non-elected invention.

***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
4. The drawings contained one sheet of figures 1-2 was received on 3/23/04. These drawings are objected by the Examiner for the following reason(s).

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following features must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

First, the feature related to an anti-glare layer and a resin layer formed on at least one side of the anti-glare layer as recited in claim 1;

Second, the feature related to the arrangement of the anti-glare layer and the resin layer on a transparent support having a film as recited in claims 18 and 19;

Third, the feature related to the arrangement of the anti-glare layer and the resin layer on a polarizing plate as recited in claim 26.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

6. The abstract of the disclosure is objected to because it longs than 150 words, and the term "means" is used. See line 9 of the abstract. Correction is required. See MPEP § 608.01(b).

7. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

8. The lengthy specification which was amended by the pre-amendment of 3/23/04 has not been checked to the extent necessary to determine the presence of all possible

minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

9. The disclosure is objected to because of the following informalities: The summary of the invention is objected to because it contains numerous details of the invention. See MPEP 608.01(d). Applicant should amend the present summary and providing a brief technical description of the invention and moving other details of the invention to the section of "Detailed Description of the invention". Appropriate correction is required.

#### ***Claim Objections***

10. Claims 4, 6, 7, 10-11 and 12 are objected to because of the following informalities. Appropriate correction is required.

a) In each of claims 4, 6, 7 and 10 the feature related to the precursor recited in each claim lacks a proper antecedent basis. Applicant should note that since the base claim 4 recited the feature "at least one curable resin precursor" (claim 4, line 3); therefore, the terms --at least-- should be added for each of the feature related to the precursor recited in each claim 4, 6 and 10.

b) In each of claims 11 and 12 the feature related to the cure resin recited in each claim lacks a proper antecedent basis. Applicant should note that since the base claim 4 recited the feature "at least one curable resin precursor" (claim 4, line 3); therefore, the terms "the cured resin" appeared on line 3 of each claim should be changed to --at least one curable resin precursor-- .

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1, 3-20 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi et al (U.S. Patent No. 6,573,958)

The applied reference has a common inventor, Hiroshi Takahashi, with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Takahashi et al discloses an antiglare and light scattering sheet. The sheet comprises a plurality of polymers varying in refractive index and has bicontinuous phase structure wherein the bicontinuous phase structure is formed by spinodal decomposition from liquid phase. As a result, the incident light is scattered isotropically and the transmitted and scattered light at a scattering angle of 2 to

40 degrees and a high total light transmittance of 70 to 100%. The sheet is laminated to a support in the form of a transparent support or a polarizing element which is used in a liquid crystal device. See column 3. The use of polymers materials for making the light transmitted and scattered sheet is provided in columns 5-7 wherein one of the polymer is used as a curable resin precursor in a solvent wherein the phase separation between the material is made by spinodal decomposition from a liquid phase. The limitation related to the transmission and scattering of light are provided in columns 9-10. The means for curing of the material by using thermal source is provided in columns 11-12.

13. Claims 1, 3, 18-20 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Uchiyama et al (U.S. Patent No. 6,177,153).

Uchiyama et al disclose an optical device which is able to use as an antiglare element (column 12). The optical device comprises a void-containing oriented film having a total light transmittance of 87% or higher when the film is used as a light transmitting member of a liquid crystal display. See column 4. The lamination of the film on a polarizing plate or a transparent film of an optical device is also disclosed as can be seen in columns 16-17 and 22-23. The film comprises some grooves on its surface thereof and thus defined an uneven surface structure. The film sheet is made by a layer whose material is selected from a groups of thermosetting resins. See columns 6-8. The device has a total transmittance and the scattering intensity is largest when the angle in the range of -10 degrees to 10 degrees. See column 22 and figure 20.



***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (U.S. Patent No. 6,573,958).

Takahashi et al discloses an antiglare and light scattering sheet. The sheet comprises a plurality of polymers varying in refractive index and has bicontinuous phase structure wherein the bicontinuous phase structure is formed by spinodal decomposition from liquid phase. As a result, the incident light is scattered isotropically and the transmitted and scattered light at a scattering angle of 2 to 40 degrees and a high total light transmittance of 70 to 100%. The sheet is laminated to a support in the form of a transparent support or a polarizing element which is used in a liquid crystal device. While Takahashi et al do not explicitly state that the sheet has a haze of 10 to 60% as claimed in present claim 2; however, such feature is inherently from the structure of the sheet as provided by Takahashi et al. The support for that conclusion is found in the materials used to form the transmitted and scattered sheet and the manner in which the sheet is formed. In other words, since the material used to make the sheet and the manner in which the sheet is made as provided by Takahashi et al are similar to those described in the present specification, and thus the value of haze of the

sheet provided by Takahashi et al has a similar value. If it is not inherent then it would have been obvious to one skilled in the art at the time the invention was made to adjust the ratio of polymers used to make the sheet for the purpose of obtaining a product having a desired haze value.

Regarding to the feature that the visibility of a transmitted image is measured by an image clarity measuring apparatus having a slit of 0.5 mm, such use of an image measuring apparatus using a slit of 0.25 to 0.5 mm for measuring light is known to one skilled in the art as can be seen in the present specification in page 3.

### ***Double Patenting***

16. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ

644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

17. Claims 1-14 and 18-20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6,945,656. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons.

Claims 1-16 of the Patent No. 6,945,656 discloses an anti-glare film having an antiglare layer and a resin layer wherein the structure and the materials of the layers meet all of the features recited in the present claims 1-14 and 18-20. In particular, the features recited in present claims 1 and 4 are disclosed in the Patent claim 1 and the features of present claims 2-3, 5-14 and 18-20 are disclosed in Patent claims 2-16 .

18. Claims 15-17 and 26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No.

Art Unit: 2872

6,945,656 in view of Tadahiro et al (Japanese reference No. 2001-281411, submitted by applicant).

Claims 1-16 of the Patent No. 6,945,656 discloses an anti-glare film having an antiglare layer and a resin layer wherein the structure and the materials of the layers meet all of the features recited in the present claims 1-14 and 18-20. In particular, the features recited in present claims 1 and 4 are disclosed in the Patent claim 1 and the features of present claims 2-3, 5-14 and 18-20 are disclosed in Patent claims 2-16 .

It is noted that claims 1-16 of the Patent do not disclose the features recited in present claims 15-17 and 26 of the present application. However, the use of an antiglare film wherein the resin layer has a refractive index inside the claimed range of 1.36-1.49 as recited in present claim 15 or the resin comprises curable fluorine compound as recited in present claims 16-17 or the film is laminated on one side of a polarizing plate as recited in present claim 26 are known and disclosed in the art as can be seen in the antiglare film provided by Tadahiro et al. See sections [0005], [0015]-[0016], for instance. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the film as provided in the patent claims 1-16 by laminated the film on a polarizing plate wherein the resin layer is made by a resin having refractive index in the range of 1.36-1.49 and contained fluorine material as suggested by Tadahiro et al for the purpose of improving the optical performance of a polarizing plate having an antiglare function.

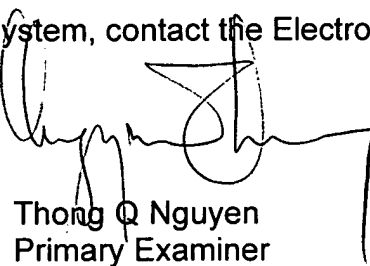
**Conclusion**

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thong Q Nguyen  
Primary Examiner  
Art Unit 2872

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